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Abstract

This article discusses one approach to conducting thematic analysis using structured qualitative data collected from focus groups. Thematic analysis is one of the most used but often poorly defined approaches in the qualitative research community. The method is principally concerned with the identification of patterns which are then reported as researcher-generated themes. In this article, I use data obtained from the Qualitative Data Repository to demonstrate how secondary qualitative data can be analyzed to produce themes. I note the ways in which this process unfolds as well as how it differs from other techniques.

Keywords

qualitative research, research methods, thematic analysis

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Conducting Thematic Analysis with Qualitative Data

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This article discusses one approach to conducting thematic analysis using structured qualitative data collected from focus groups. Thematic analysis is one of the most used but often poorly defined approaches in the qualitative research community. The method is principally concerned with the identification of patterns which are then reported as researcher-generated themes. In this article, I use data obtained from the Qualitative Data Repository to demonstrate how secondary qualitative data can be analyzed to produce themes. I note the ways in which this process unfolds as well as how it differs from other techniques.

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Qualitative research is a diverse field that employs a variety of analytic techniques to produce an understanding of rich datasets. Among the more common techniques used by qualitative researchers, thematic analysis involves the identification of recurring patterns that are presented by researchers as overarching statements or themes. Webster's Dictionary conveniently defines a theme as a unifying or dominant idea, and this captures well the essence of a theme in qualitative research. In this article, I discuss my approach to thematic analysis. For this discussion, I draw from a common data set retrieved from the Qualitative Data Repository at Syracuse University. In this article, I begin by discussing the literature related to thematic analysis. Next, I describe how I typically undertake thematic analysis. My approach may differ from other scholars who use this methodology or who have sought to describe this methodology in the research literature. Indeed, for a contrasting perspective, scholars might wish to review Braun and Clarke's (2006) well-cited approach. Finally, I offer reflections on the analysis I present which explain the affordances and limitations of thematic analysis.

In comparison with other analytic strategies used by qualitative researchers, thematic analysis is one of the most ambiguously defined analytic techniques in the qualitative research field. Scholars have reached limited agreement about how thematic analysis should be performed (Attride-Stirling, 2001; Boyatzis, 1998; Tuckett, 2005). As Braun and Clarke (2006) have previously asserted, many argue that thematic analysis is "poorly demarcated" and "rarely acknowledged" in qualitative research (p. 77). Indeed, one need only review the methodology sections of published research articles or qualitative dissertations to find that there is significant ambiguity about how to identify themes from qualitative data. Braun and Clarke (2006) offer what is perhaps one of the clearest definitions in the methodological literature. They define thematic analysis as "a method for identifying, analyzing and reporting patterns (themes) within data" (p. 79). This definition presumes that an analyst produces a generalized understanding of coded data based on the recurring application of codes and the patterns associated with those codes. The more frequently codes appear in the data set, the more likely it is that the analyst will state that code as the basis of a theme. While thematic analysis may consider coding frequencies in the production of themes, this analytic approach should not be treated as a purely quantitative exercise. Rather, it often requires the analyst to move beyond frequencies to ascertain the salience and meaning of the underlying dataset. This reflects what is traditionally thought of as the iterative nature of qualitative research. Finally, though I treat

thematic analysis as a discreet analytic approach in this article, it clearly has the capacity to propel readers toward more sophisticated analytic techniques. Indeed, Braun and Clarke (2006) have noted that this analytic approach serves as the foundation for many types of qualitative analysis, which includes some types of content analysis (Krippendorff, 2018; Vaismoradi, Turunen, & Bondas, 2013), ethnography (Hammersley, 2006) and thematic narrative analysis (Riessman, 1993), among many others.

Orientation to Data and Research Participants

Broadly, thematic analysis is consistent with Denzin and Lincoln's (2011) conceptualization of qualitative research, which holds that "qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" (p. 3). When focused on interviews or focus groups, thematic analysis presumes that the participant's recollections have value that merits exploration, synthesis and intensive description. When focused on documents or other retrieved artifacts, thematic analysis presumes that the recorded information is an accurate reflection of the reality that existed at that time and therefore should be treated with the same degree of confidence as participant's spoken recollections. This orientation presumes that the researcher sees the data reported by the participants or retrieved in documents as convincing. Thematic analysis is thus predicated upon a high degree of confidence about the reliability and trustworthiness of the information reported. The aim of thematic analysis is, then, to consider how the reported information addresses a specific research question or invites a new conceptual or theoretical understanding. In doing so, thematic analysis speaks to the data in a large sense and less often delves into the very detailed nuances of an individual's experiences.

The analyst's orientation to thematic analysis inherently depends on the specific research questions they use to guide their study. In my view, thematic analysis is a fundamentally question-driven exercise that depends on clearly articulated lines of inquiry to frame the scholar's interpretation of the data. Braun and Clarke (2006) observe that thematic analysis can be oriented so that it "reports experiences, meanings and the reality of participants" (p. 81). This has implications for the kinds of questions that an analyst might address using thematic analysis and interpretation. These questions often begin with "what" or "why" and less frequently include questions that begin with "how." When oriented in this manner, thematic analysis summarizes what the participants see as valuable and is principally concerned with producing a descriptive account of the participants' understanding. A thematic analysis might focus on similarities or differences in repeated patterns found within the dataset. For example, Dodson, Baker, and Bost (2019) conducted a qualitative research study of 10 nurse practitioners who routinely prescribed medication within a clinical setting. The study sought to assess perceptions of trustworthiness surrounding clinical decision support tools and mobile applications. The authors produced four themes, which related to the use of pharmacists to help with current prescribing practices, reliance on the electronic medical record (EMR) as a clinical decision support tool, lack of mobile application use in clinical practice, and desire for affordable and reliable mobile application resources. These themes described broadly the nurse practitioners' perceptions about the trustworthiness of clinical decision support tools and the potential affordances of mobile applications.

Alternatively, Braun and Clarke (2006) note that thematic analysis can also be a "constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society" (p. 81). When framed in this way, the constructionist orientation seeks to apply the analyst's interpretation as rooted in a conceptual or theoretical framework. As such, the research moves from simply describing what participants report to offering an interpretation of the patterns that

the analyst has observed. Galvin, Suominen, Morgan, O'Connell, and Smith (2015) conducted qualitative interviews with 12 mental health nursing students to explore how stress during their training experience impacted them and to articulate what potentially caused their stress to increase. The researchers identified "unreasonable demands" that arose during clinical blocks as well as negative staff perceptions both related to increased stress among the 12 mental health nursing students. Unlike the study conducted by Dodson, Baker, and Bost (2019), which largely recounted participants' experiences, this study sought to explain why a particular phenomenon existed based on the repeated statements of participants in the study. As such, the study provides an instructive example demonstrating how a theoretical idea can be introduced and validated through the identification of repeated patterns in data.

Thematic analysis thus can be descriptive, explanatory, and/or critical in nature. Thematic analysis enables scholars to define and describe what a participant's reality is using their own written or spoken account. This orientation summarizes what participants report and therefore aggregates these understandings into identifiable patterns. As an explanatory tool, thematic analysis can be used to infer meaning about experiences, perspectives, or belief systems through the lens of a particular conceptual or theoretical framework. This approach involves considering how the patterns found within data depict particular conceptual or theoretical ideas. This approach requires the analyst to match patterns to a specific theoretical or conceptual explanation. Thus, it is often undertaken when the analyst's coding scheme is defined a priori. Finally, as a critical analytic tool, thematic analysis can be used to identify persistent gaps in the reported experiences of participants. These gaps are often representative of recurring patterns which point to the existence of oppression, discrimination, or an imbalance of power. The themes produced thus seek to elevate these patterns for the purpose of scholarly interrogation and to potentially address these issues in practice, policy, or through the development of enhanced social awareness.

Components of Thematic Analysis

Although scholars approach thematic analysis differently, I have found that this analytic technique customarily includes three components: individual codes, categories, and researcher-produced themes. Codes and coding practices have been described at length in the qualitative methods literature (Saldaña, 2015). Codes are, quite simply, "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldaña, 2015, p. 4). Codes might be applied to a single word, sentence, paragraph, or visualized portion of qualitative data. This data might include interview transcripts, observational notes, researcher- or participant-generated journals or notebooks, documents, open-ended survey responses, images (e.g., photographs or drawings), video, websites or blog posts, written correspondence (e.g., emails, letters, etc.), or published academic literature (e.g., books, articles, technical reports). Codes thus connect the researcher's analysis with the data s/he collected (Charmaz & Mitchell, 2001). In thematic analysis, codes have a particularly powerful role as it is from individual coded segments that a researcher's identification of patterns begins. Individual codes often produce a sense of the data that then informs how the analyst assigns value to different perspectives, experiences, or recollections. Typically, in my own research, I tend to code large sections of text as opposed to individual words. This tends to capture the essence of the experience that the participant reported.

In my view, thematic statements ultimately depend on the development of robust categories as codes are insufficient to produce themes. As Riessman (2011) observed, coding causes "detail and specificity to slip away in favor of general statements about the phenomenon of interest" (p. 311). Coding means that interviews and other data sources are "fractured" into

smaller analytic bits that become the basis for "generalizations about human processes that hold across individual participants" (Riessman, 2011, p. 311). Indeed, as Saldaña (2015) observed, "a code can sometimes *summarize, distill,* or *condense* data, not simply *reduce* them" (p. 5, emphasis in original). Thematic analysis is thus dependent upon re-assembling these fragments into constructs that contribute to the larger theme. This re-assembly is encapsulated in the identification of robust categories that speak to the essence of the underlying codes. These categories define (un)related and (dis)similar patterns in codes that the efficiency of themes do not allow a researcher to report. Categories thus represent the first step toward the identification of patterns. Saldaña (2015) defines a pattern as "repetitive, regular, or consistent occurrences of action/data that appear more than twice" (p. 5). Patterns explain (inter)relationships in ways that allow researchers to state commonalities across their observations. These patterns serve as the basis for themes and are operationalized within the data analysis as categories. Categories represent emergent patterns that the analyst aggregates to develop thematic statements. The aggregation allows the analyst to put different pieces of the data into conversation with one another. For instance, two categories which point to a discrepancy might be encapsulated in a thematic statement as conflict or differentiation.

Before proceeding, it bears noting that the function of categories is one of the more opaque aspects of analysis and it is especially so in thematic analysis. For some, categories may feel like an unnecessary step. If patterns exist at the coding level, why bother establishing categorical descriptions since they are ultimately encapsulated within broader thematic statements? Since they are not visible to the reader, why are these important? Certainly, these are valid questions and they merit consideration by the analyst. In thematic analysis, it is certainly possible for researchers to identify and report on patterns derived from individual codes. This seems particularly common in content analysis (Vaismoradi et al., 2013), where individual coding frequencies ultimately yield the production of findings. However, in case study research or ethnography, it is my opinion that this approach weakens the development of robust themes as it reduces the analyst's ability to "build up" the theme in a transparent and meaningful way. In effect, it leaves an element of mystery between the individual codes and the themes. In doing so, it raises legitimate questions about the transparency of the analysis and the trustworthiness of the analyst's claims. For instance, how do you know that the theme refers to more than an isolated case or single example drawn from the data?

Thus, in my view, developing categories is an essential step in the development of a theme as they contribute to the analysts' ability to communicate the substance of the theme. Namely, they help scholars articulate the various theoretical or conceptual assumptions about the data that they made during the analytic process. In my own work, I use categories to populate sub-headings to walk the reader through my interpretation of the data so that they understand how I produced my themes. This practice allows the reader to follow my interpretations as well as see how the data relates. I find this also supports the writing process as the researcher can construct sections of the manuscript/final research report around underlying categories which provides a logical and clear flow.

Finally, thematic analysis involves as a final step the production of broad overarching statements that describe what is happening in the underlying data. Thematic statements embody the same qualities as a well-known song in that they describe the essence of the data in a compelling way. For example, "enabling actions in healthcare systems for improved patient care" might be offered as a theme describing a combination of actions taken in a healthcare system to improve the quality of patient care. Hypothetically, it would follow that categories such as "frontline nursing practices," "physician's bedside relationships," and "quality of communication" might broadly support this theme and, as mentioned in the previous paragraph, be used to build-up the theme so that the reader understands how it was produced. Themes thus serve as an invitation to explore more deeply a particular aspect of the dataset.

Data Sources

To complete the analysis presented in this article, I used a shared dataset from a research study that explored postnatal care referral behavior by Traditional Birth Attendants (TBAs) in Nigeria, including the perceived factors that may deter or promote referrals to skilled health workers. I acquired the data from the Qualitative Data Repository at Syracuse University. The dataset was provided to me and I was not part of the original study's conceptualization or data collection. The data includes three transcripts from focus groups conducted with hospital-based health workers, TBAs, and Nigerian women who delivered their child at home with the assistance of a TBA. The focus groups were conducted at a federal teaching hospital and range in length from 64 to 87 minutes. A research team conducted each of the focus groups. I did not participate as a member of the original research team. Indeed, a significant limitation of this exercise is that I was unaware of the motivation for the study.

Importantly, the focus groups employed a structured format wherein researchers asked participants a series of open-ended questions followed by more precisely focused probes. This format works especially well in a thematic analysis as the structure of the conversation lends itself to grouping ideas, concepts, or issues more easily. This structure also allows researchers to compare responses across participant perspectives. For example, in this data, I found it helpful to compare the responses from health workers, TBAs, and Nigerian women to determine how they collectively and individually identified differences in the quality of care provided in hospital- and home-based settings.

Analytic Process

For this illustrative example, my approach involved three phases: setup, analysis, and interpretation. I discuss each of the phases below providing examples from the same dataset where appropriate. Notably, these phases subsume some of the elements of Braun and Clarke's (2006) approach for both simplicity of illustration, as well as to better support novice researchers. They also mirror the process proposed in the introductory research text by Lochmiller and Lester (2017).

Setup Phase

Before completing a thematic analysis, I always invest considerable time setting up my data for the analytic efforts I plan to undertake. This practice involves inventorying the dataset in preparation for analysis as well as setting up files so that they are well-organized in my computer assisted qualitative data analysis software (CAQDAS) package. I begin by transcribing audio or video files, deleting identifiable references, and uploading these files to a CAQDAS package. At this stage, I also convert my field notes to Microsoft Word (if they were previously handwritten) and scan any paper-based artifacts to Adobe PDF file format. I also download and save any Adobe PDF documents from research participants or online searches that I intent to use in my analysis. Finally, I adopt a consistent file naming protocol for each file and record the information about each file in a Google or Microsoft Excel spreadsheet. I use this spreadsheet to track the file name, and include a brief description of the data, variables pertinent to the data, and the date I collected the information. For interviews or focus groups, I always record the length of the conversation and the number of participants involved. While this step may seem trivial on a dataset with only three focus group transcripts, it is especially important in a study with a large dataset that includes multiple interviews or focus groups. Indeed, I have found in my own practice that a poorly organized dataset slows the analytic process and creates more work in the end.

An important consideration in the setup phase is whether to establish all of the codes before the analysis begins. Thematic analysis does not assume that the analyst fully develops his or her coding scheme. In my own practice, I tend to make this decision based on the theoretical or conceptual assumptions that guide the study as well as the complexity of the dataset. In complex studies involving large amounts of data, I typically establish a simple descriptive coding scheme that helps organize the dataset by participant, setting, and other important characteristics. For instance, in this illustrative study, I established descriptive codes that noted the participant's role (e.g., TBA, Healthcare Worker, Patient, Researcher). I also created descriptive codes that linked to the topics for the questions (e.g., Methods of Treatment, Quality of Care, etc.). These codes helped prepare the dataset to make comparisons by participant perspective. Admittedly, this was a relatively simplistic dataset and so did not require much preparation or setup. In a more complicated undertaking, this process might involve significantly more effort. This approach was also appropriate as the present study did not use an explicit theoretical or conceptual framework. In more complex studies, I would have included more robust descriptive codes that would have allowed more precise and in-depth comparisons.

In studies where an explicit conceptual or theoretical framework is used, I often develop a coding scheme that relates to concepts in the literature. For instance, had this study considered how TBAs and health workers learn from each other, I could have framed this study using concepts from organizational theory, such as a community of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Synder, 2002). This concept, which has been applied to health research (Li et al., 2009), would have allowed me to explore how TBAs and health workers engage each other for the purpose of learning and socialization that occurs between novice and experienced health providers. This framework would have allowed me to identify new health strategies that health workers and TBAs adopted as they became familiar with the normative expectations of the local health community. The coding schemes would have focused on behaviors associated with participation in a community of practice, such as situated learning (Lave & Wenger, 1991) or identity development (Wenger, 1998). Alternatively, I could have focused on the roles that members of a health community assumed, such as leaders, champions, or facilitators (Wenger et al., 2002). This would have shifted my focus to exploring the roles that health workers and TBAs assume relative to their patients. Ultimately, the themes produced through the analysis would have referenced theoretical or conceptual ideas drawn from this perspective.

Analysis Phase

After setting up the data, thematic analysis begins by reviewing the dataset to become familiar with the central ideas, concepts, or experiences described by research participants, recorded in observation notes, or referenced in artifacts. Braun and Clarke (2006) describe thematic analysis using a model that includes six phases. While their approach certainly informs my own, it does not completely define it nor does it fully inform how I approach thematic analysis.

My approach begins by familiarizing myself with data. This represents the first phase of the approach by Braun and Clarke (2006). At this stage, I seek to become familiar with the data but try to avoid imposing an interpretation on the dataset. To this end, I often make informal jottings in the margins or use the memo function in my CAQDAS package to capture any initial reflections about the participants, data, or circumstances that shaped the completion of the interview or focus group. In some places, I may highlight specific words, phrases, or participant recollections that I feel could be potentially responsive to my research questions

and therefore worth noting for later analysis. It is important to ask basic descriptive questions at this stage in order to become familiar with the dataset. These questions might include:

- What is happening?
- What is the participating saying?
- What key points or ideas are they expressing?
- What points do they appear to agree or disagree about?
- What perspectives are (dis)similar?
- What experiences do they hold in common?
- What experiences are being described?

Familiarity with the dataset is key when conducting a thematic analysis as it allows the researcher to begin identifying initial patterns that may serve as the basis for categories. Thus, I use these descriptive questions to familiarize myself with the data and try to avoid making unnecessary inferences about the participants' perspective or ideas.

Similar to Braun and Clarke (2006), my next step is to develop an initial set of codes. Saldaña (2015) refers to this as first cycle coding. In thematic analysis, the first cycle of coding is designed to partially reduce the data set to identify initial ideas that may be further developed or excluded as the analysis proceeds and as patterns become more or less visible. Thus, a portion of this work might have already been completed when setting up the dataset. Unlike other approaches to qualitative research, the aim of thematic analysis is rarely to code word-by-word or line-by-line. Rather, thematic analysis seeks to discern the gestalt of the data and therefore examines (un)related and (dis)confirming points or perspectives as evidenced in coding patterns. The aim of the first cycle of coding is to identify meaningful and potentially relevant passages of text that will be analyzed further in subsequent coding cycles. It is important to recognize that not all passages will be equally valuable, indeed some may not be considered as the analysis unfolds. In the sample dataset, I included descriptive codes such as "health risks," "example of pain," "hospital practice," "TBA practice," "financial cost," and "use of medication" among others. These codes describe experiences, perspectives, or reflections offered by the focus group participants and thus begin to illuminate their primary concerns.

The third phase of Braun and Clarke's (2006) model emphasizes the search for themes. Their particular description does not fully align with my own approach. Indeed, in my own practice, I rarely find themes at this stage and so recommend that researchers progress through a second cycle of coding as recommended by Saldaña (2015). In the second coding cycle, I typically focus on previously coded passages and strive to produce categories that broadly–but still incompletely–define related portion of the dataset. In this cycle, I pay particular attention to codes that appear (un)related as their relationship (or lack of it) serves as the basis for the identification of patterns. For example, in the current data set, I noted that "roles" and "provider authority" appeared somewhat frequently in the focus groups transcripts obtained from health workers and TBAs. Upon further review, I found that participants often discussed their respective status, boundaries of their professional knowledge, and their perceived authority to provide care in specific (usually high risk) situations. Given the frequency of the pattern, as well as the number of references, I opted to produce a category at this stage which referred to these segments as "authority to provide care." Thus, in the sample dataset, I assigned this categorically related code to any statement that appeared related. I use these codes to identify and select salient passages or quotes for inclusion in the final report. I generally repeat this process until I have identified a sufficient number of categories to be able to articulate a theme. Indeed, at this stage, I enter the final step in my analysis, which involves reviewing possible themes and beginning to articulate them in a meaningful way.

Interpretive Phase

The final step in my analysis process involves identifying (dis)connections across categories in order to produce themes. I call this the interpretive phase because it describes a much more intentional and sophisticated kind of analytic work. Broadly, Braun and Clarke (2006) refer to this as phases four and five of their model and it essentially describes the researcher's efforts to review, define, and name themes. To be fully transparent, I acknowledge that there are no hard rules about this process nor guidance that can inform the decision-making process. Rather, what typically guides my thinking at this stage is the extent to which a theme is substantiated by categories as I find that a sufficient number of categories ensure that the theme can be "built-up" for the reader. The questions I ask at this stage often include:

- How do the categories support the development of the theme?
- To what extent is the theme supported by the perspectives of multiple participants?
- What areas of agreement, disagreement, similarity, or difference does the theme include?
- Which quotations or examples offer the most compelling support for the theme?
- How should I substantiate the theme using quotations and/or primary data sources?

While not comprehensive, these questions provide opportunities to explore the relationships that I find most commonly result in the production of a theme. In my own work, I typically report themes with a large number of categories in the final manuscript as these categories allow me to demonstrate to the reader how the theme came to exist and to illuminate any analytic decisions that led to the production of the thematic statement. At this stage of the analysis, I also refer back to my research questions to determine how the theme(s) respond (or not) to them.

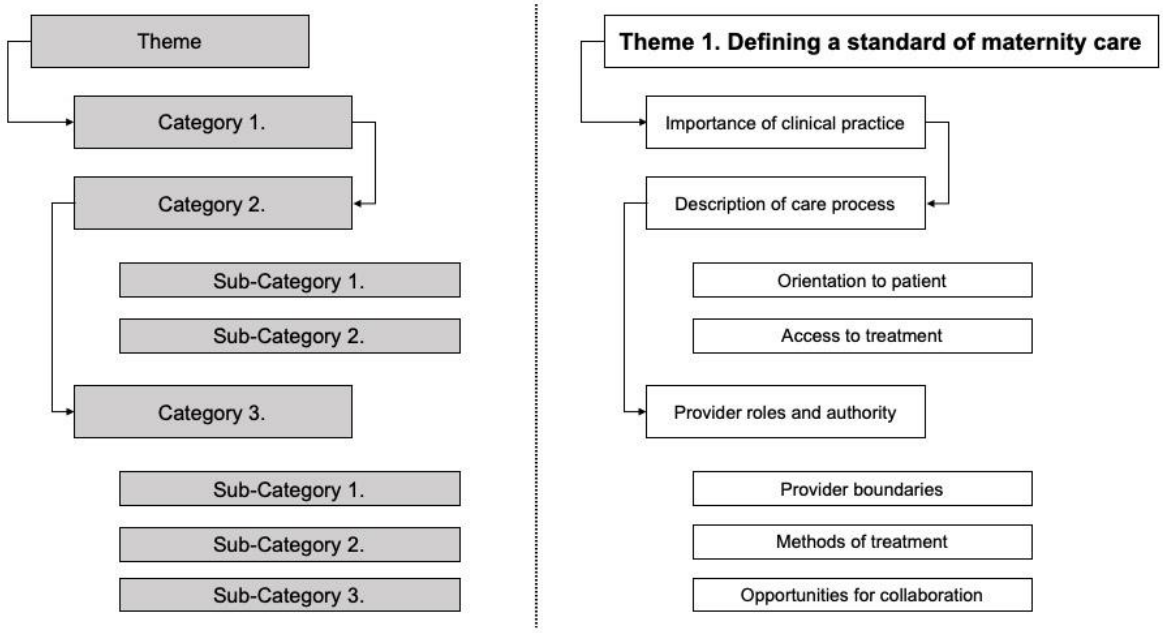
Illustrating the Product of Thematic Analysis with Findings

To effectively communicate the results of a thematic analysis, it is important to structure findings in relation to themes and to substantiate these statements using examples drawn from the dataset. As shown in Figure 1, the presentation of data includes a combination of statements referring to specific themes and a series of related categories and/or sub-categories derived from the dataset. Thematic statements capture the essence of the data, while categories offer greater detail from the participant's observations or reflections. This structure has two distinct advantages. First, it allows the empirical argument to be developed around the themes reported from the data. Second, it produces a robust understanding of the dataset by demonstrating how various underlying data elements relate to the theme(s). Below, I illustrate the structure of thematic findings using the results of my analysis of the shared dataset.

In the sample dataset, I found one prominent theme across each of the three focus group transcripts. This theme, which I describe as "Defining a Standard of Maternity Care," refers to the ways in which the participants each described their own perspectives about the maternity care that they felt most appropriate or valuable given their perspectives. This theme broadly captures the discussion presented in the three focus groups and explains the relationships among the participants' perspectives. Related to this theme, I found that much of the discussion focused on the *importance of clinical practice*, *descriptions of the care process*, and a discussion about *provider roles and authority.* These perspectives were especially prominent among health workers and TBAs; yet, they also corresponded with the statements offered by women who participated in a focus group. To these categorical descriptors, I also noted some underlying points that appeared frequently and thus served as sub-categories that merit

particular discussion. This included, for example, *orientation to patient* and *access to treatment* as an important part of the care process. I also noted that *provider boundaries*, *methods of treatment*, and *opportunities for collaboration* appeared to be centrally related to the discussion of provider roles and authority.

Figure 1
Illustration of How Categories Shape a Theme



Drawing from the structure described above, I next present an illustrative reporting of themes derived from the shared dataset. This section illustrates how I typically approach the development of a findings section and may be especially instructive to researchers who are unfamiliar with how to produce and share findings produced from a thematic analysis. For this exercise, I used a single research question to inform my interpretation: How do health workers, traditional birth attendants, and patients describe maternity care in different medical settings?

Theme 1. Defining a Standard of Maternity Care

Participants in each of the focus groups discussed the care women required for safe childbirth and how care should be provided given their respective clinical settings. This conversation invited negotiation between the focus group participants about an appropriate standard of care that reflected the woman's specific health needs, issues that arose before, during, and after childbirth, as well as the provider's own professional perspectives. Broadly stated, the data suggest that participants were attempting to define a standard of maternity care that was appropriate given the local health conditions and individual patient needs. Healthcare workers and TBAs both described the importance of prompt and thorough medical care during childbirth, though differed in their individual assessment about when such care could be provided outside an institutionalized medical setting, such as a regional hospital or medical clinical. Responses within the focus groups suggest that all participants were concerned about how to provide medical care to women who experienced complications during their pregnancy or immediately following childbirth, though the responses differed in their emphasis on the importance of pre-natal and post-natal care. Indeed, I found that much of the discussion focused

on the quality of care as defined by clinical practice or resources available in the medical setting. This included how the provider oriented to the patient and what level of access they had to emergency medical treatment. In addition, participants also discussed different provider roles and authority noting that this influenced the methods of treatment available and suggests the need for cross-provider collaboration to ensure improved health outcomes. I discuss each of these points below.

Comparisons of Provider Quality and Healthcare Resources

The women who participated in the focus groups discussed the quality of care provided by the health center and the resources available in a comprehensive medical setting using explicit comparisons drawn from their experience. The women generally saw the quality of care provided by the health center as being superior to the quality of care provided by a TBA, though their assessment was not universal. At times, women disagreed that TBAs could not provide care that was as effective or safe. Women who saw care provided at the health center as being superior to the TBA based their perspectives on access to advanced medical services and rationalized the quality of care based on the potential dangers associated with childbirth (e.g., bleeding, infection swelling legs, etc.). As one woman reflected, "It is better to go to the health center because they will take good care of you." Her assessment was based on the health center's ability to provide safe pre-natal and post-natal medical services. Another woman offered a stronger rationalization noting that women who received care at the health center had access to better medical equipment. She stated, "It is good to go to the health center because they can take good care of you more than the TBA, those women do not have all the equipment to take care of any problem that arises." The comments collectively suggest that the quality of care was related to the perceived quality of the health center's infrastructure and resources. Indeed, access to medical equipment appeared to be a significant factor that explained whether the women saw the care provided by a TBA as safe.

Healthcare workers offered a more nuanced description of the differences in the quality of care, with many emphasizing the availability of sterile care practices as a predictor of successful patient outcomes. Health workers repeatedly observed that they did not see TBAs employing sterile practices during pre-natal, delivery, and post-natal interactions with women. For instance, one healthcare worker observed that TBAs did not use gloves during delivery or sterile razors. As she reported, "There was a time they were sharing mama kits and delivery kits," a reference to medical supplies used during childbirth that should not be shared from patient to patient due to the potential for infection, including HIV. Another health worker observed that TBAs should be given clear guidance from health workers about appropriate sterile practices. As she noted, "they should use marking touch for the women during delivery and not to use carton or mat, we should encourage them to use gloves and to maintain general hygiene during delivery. They should use Dettol and Jik in sterilizing the place they use for the delivery." For healthcare workers, infection control was thus viewed as a significant marker of quality of healthcare, particularly for women who were HIV-positive at the time of their delivery. Indeed, healthcare workers observed that TBAs often did not exercise the appropriate precautions to prevent spreading HIV from mother to baby. In one instance, a healthcare worker found that a baby was positive for HIV while the mother and father were both negative. The healthcare worker reported that she "found out that the baby was contaminated at the place of delivery, for there were actually two women that delivered there that same day." As the healthcare worker learned, a "TBA used the same tools she used for the HIV positive mother to deliver the other woman, and the baby contaminated it from there."

Both health workers and TBAs commented about the availability of drugs and immunizations as another resource that highlighted a difference in the quality of care provided.

As one TBA reported, "You cannot compare the care and services of a health facility with ours, because the drugs given to the women there have dose, say for morning, afternoon and night." In contrast, the TBA described herbs that she used with women who could be "given a full cup of the concoction to finish, and you cannot tell if that will make her loose blood or gain blood." While coming from different perspectives, both health workers and TBAs pointed to the availability of drugs and immunizations in the healthcare facility as one reason the care provided in that setting might be perceived as superior to home-based care provided by a TBA. Indeed, health workers openly observed that having access to drugs (i.e., antibiotics and pain medications) and immunizations was an important resource for caring for women during and after childbirth. They cited emergency situations where access to these resources improved the chances of both a successful birth and successful recovery for the patient.

The TBAs offered a different perspective about the reason(s) that a woman might pursue care in a health center, emphasizing the degree of risk associated with the woman's pregnancy. Similar to the health workers, the TBAs placed particular emphasis on accessing health centers when their own resources were insufficient to address a woman's health needs. The TBAs appeared acutely aware that the quality of care could not be compared. As one noted, "you cannot compare the services of the health center with that of the TBAs, because the TBAs use their bare hands, but the health center has the facilities and equipment needed to provide adequate services for the women." Another TBA reported that she will not "make the woman experience the pains of labor in my house when I see that things are getting complicated, that is just suffering the woman." Consideration for the patient's health was a major consideration for TBAs. They associated high risk deliveries with a greater likelihood of severe complications and thus sought to reduce these circumstances by engaging the support of the health center. Their responses suggest that the TBA defined the quality of care they could provide in relation to the risk or potential risk of the patient's health condition.

Access to Treatment Resources

The participants noted the importance of access to treatment resources as a factor in determining whether they considered the care they received to be of high quality. These resources included sterile supplies, immunizations, antibiotics, and pain medications in addition clinical facilities that allowed the prompt intervention in case of a medical emergency. These were viewed as particularly important because they increased the likelihood of a successful delivery with fewer complications. As one woman noted, "It is good to go to the health center because they can take good care of you more than the TBA, those women do not have all the equipment to take care of any problem that arises." Another woman noted that, "There is this pain that women usually have after delivery, it is necessary that a woman goes there to be injected as that pain can lead to bleeding." In both statements, the women pointed to the resources available at the health center as a primary marker for the quality of care that they would receive. This perspective appeared to align with the views of health workers who participated in the focus groups, as well. As one health worker noted,

> It is important that the women come [to the health center] for postnatal care because there are some conditions that the women will be into that will require the attention of the health workers in the health facility. There was this woman that came for antenatal care in the health center but she later went to the TBA to deliver, she later had some complications there and they brought her here, after examining her she was looking so pale and had to blood. So, I had to refer her out, when they got there, they had to do blood transfusion immediately. If not for that, the woman would have lost her life like that.

The health worker's comments are illustrative and point to the legitimate health risks that a health center or hospital is equipped to address. Further, it provides evidence about the real risks that many women face during childbirth. One of the main reasons that care provided by the health center was viewed as being high quality was that it offered services that appeared to the women and healthcare workers to minimize risks to the mother and baby.

Personalized and Responsive Practice

Although the health center infrastructure was an important quality consideration for all of the participants, the women collectively spoke to the importance of relationships as a marker for quality care. For women who viewed relationships as particularly important, many spoke to the importance of securing care from a TBA. Indeed, the women spoke about the fear and unnecessary trauma associated with receiving care from a health center. Their statements suggested that care within this setting was less personalized than care provided in their home and the absence of such a connection contributed to their fear of childbirth. The women collectively perceived that the hospital staff paid less attention to their patients and found that their time was often distributed to other patients. This understanding seemed linked to the degree to which a provider offered one-on-one attention to the patient during all phases of the childbirth experience. As one woman reflected, "The reason most women do not like going to the hospital is that a health worker there can walk pass you even while you are there shouting in pains." Another woman observed that the health faculty "will leave you in the pains and will pay attention to you only when the baby has engaged." This approach led the women to view the hospital as lacking compassion. As one observed, she felt that the hospital allowed women to have "unnecessary tears" when experiencing childbirth. This perspective represented one of the implicit critiques of hospital-based care.

Many of the women suggested that the hospital's approach differed from the care provided by a TBA. The TBA was seen as being more responsive to a woman and better equipped to calm her during childbirth. As one woman reported, "the TBA will hold you and console you while in pains till you deliver your baby." Another woman stated that the TBA would "pet the woman" during childbirth. This personalized care was viewed as an important difference between health centers and TBAs in that it helped the women feel "confident that we will deliver safely." Indeed, in relation to the standard of care expected by women, it seemed that personalized attention and individual support was an essential standard that the hospital and health workers were unable to match. While these were expressed concerns by the women, the health workers did not share this perspective. Indeed, according to them, the hospital was well-suited to provide compassionate and individualized care but within the context of a more sterile and medically skilled setting.

Provider Roles and Medical Authority

One of the questions that appeared often in the focus groups related to which providers had authority to decide what maternity care for the women should be. Indeed, I noted that categories often related the position of health care workers to the position of TBAs. This discussion was less substantial than the discussion focused on healthcare quality but did suggest that the participants perceived that health workers and TBAs had differing degrees of authority in the medical community. Focus group participants seemed to position health care workers as having greater authority with regard to their ability to support safe childbirth practices as well as provide adequate medical guidance to mothers. As such, I found that these workers were often afforded more respect by participants in the study and tended to be viewed as having

more specialized knowledge about childbirth and maternal health. I found that much of the discussion focused on the superior knowledge and skills of the healthcare providers, as well as the more advanced methods of treatment.

Emphasis on the Importance of Knowledge and Skills

Health workers emphasized the importance of medical skill frequently and suggested that TBAs had less knowledge than a health worker. This description seemed grounded in references to the kinds of practices that a health worker believed, based on their training, led to superior health outcomes for the mother and baby. For example, health workers stressed the need for pre-natal and post-natal care as well as the kind of clinical practices used during childbirth. As one health worker noted, "I am of the opinion that [the women] should receive post-natal care at least for twenty-four hours so as to be sure that they are strong. We should not be in a haste to send them home. It is also good that the TBAs know this." The health worker described a situation in which a woman who had recently given birth collapsed after being allowed to walk without assistance. Another health worker observed,

> I am also of the opinion that the women should not leave immediately after delivery, because I have also had a personal experience in my health center, the woman delivered at a TBA's home but the baby's navel was not protected. So, there was a woman that went to see the new baby and observed that the baby was not looking alright. When the baby was examined, they found out that the baby's navel was not well protected, and they had to come to meet us at the health center, before they could get to us, the baby died.

In both instances, the health worker privileged their opinion and cited best practices that the TBA was not following. Many of their comments were often rooted in worst case scenarios that described situations in which best practices had not been followed and thus the woman or her baby became seriously ill. The TBAs largely deferred to the health workers as having more significant training and therefore more knowledge about certain health situations. As one TBA noted, "if there is something that is confusing, or that I don't understand, I will take the woman to the health facility so that a health worker will examine her and say where the problem is from."

Methods of Advanced Treatment

A secondary pattern in the data highlighted differences in methods of treatment used by health workers and TBAs. Health workers noted important practices in each phase of childbirth and cited examples demonstrating that TBAs did not consistently adhere to these practices. As one health worker noted, "the TBA is supposed to tell the woman to go and immunize her child after two or three days of delivery, then she can come back for checkup after six weeks of delivery." This practice seemed to be a common expectation among health workers. At the postnatal visit, health workers described conducting a routine assessment of the woman's health. As one described, this visit includes "a checkup on their body system and also [an examination of] their physical appearance to know if she is healthy." During this visit, the health worker will also, "listen to her to know if she has any complaints concerning her body… [and] advise her on family planning, if she is interested." Another health worker offered a more expansive discussion of a postnatal visit. They noted that the postnatal visit. According to this health worker,

> we call them inside the facility, place them on the couch, examine their eyes and palpate their tummy and ask them whether they are having pains there or on any part of their body. You ask them other questions regarding their health generally. The woman will tell you certain things in the course of the discussion. You can also ask her about the family and how they are faring.

This quote demonstrates the basic clinical practice that health workers suggested healthcare providers should follow when assessing a woman's health in the clinical setting. As such, the quote demonstrates what health workers believed should occur and therefore illustrated what was likely not occurring in conversations between TBAs and their patients.

Reflecting on the Structure of a Thematic Analysis

The sections above represent my basic approach to producing a thematic analysis and provides an illustrative example of how I craft findings. As the example illustrates, the hallmark of an effectively developed thematic analysis involves making clear linkages between the overarching theme (e.g., Importance of Clinical Practice) and secondary themes that substantiate, strengthen, and further illuminate it. In my own research, I use this common structure and argue that it should be used by other qualitative researchers to help guide their readers through the various nuances of a theme. Notably, a mistake common to conducting a thematic analysis is to present each theme without substantial depth. Such an approach misses an opportunity to educate the reader about the construction of each theme and to make explicit connections to the underlying data. While the sample above is limited in scope (i.e., it only included three focus groups), it still demonstrates how I typically approach connecting participants' perspectives, as well as seek to represent areas of potential convergence and divergence in the data.

The short illustration also demonstrates how participants' roles or perspectives can be used to enhance thematic interpretation. I use a similar approach when using interview data or primary documents. When developing a theme, I seek to illustrate themes using quotations that highlight areas of similarity or potentially demonstrate areas of disagreement or divergence. I find that quotes that are similar reinforce the strength of the theme. This is especially helpful when seeking to argue in favor of a particular perspective. I tend to point to areas of disagreement or divergence when a theme is intended to illuminate an area of disagreement among participants. This strategy is particularly helpful when coding suggests inconsistent agreement among participants or when categories suggest that there are differing understandings about an issue, concern, and/or experience. In the illustrative example above, I found this approach particularly helpful in unpacking the differences between health workers and TBAs about the conditions of the health facility and practices that should be used to care for women.

A final, but important point, reflects thematic analysis' ability to potentially reduce voluminous data into clearly articulated thematic statements. Themes resonate with readers in much the same way that a song does with an avid radio listener. It evokes a particular way of thinking about the data and allows readers to recall what has been presented and its relation to their own practice. While other types of qualitative analysis may offer greater depth or opportunities for theoretical generation, I find that thematic analysis is particularly useful when a scholar seeks to define a sense of the data in broad strokes and/or to communicate the gestalt of the dataset to the reader. In both of the nursing examples I described above, the readers can recall nurse practitioners' perspectives about the use of technology (Dodson et al., 2019), as well as the stressful experiences of nursing students (Galvin et al., 2015). Indeed, thematic

analysis' emphasis on broad understanding make it a useful tool for summarizing qualitative data.

While thematic analysis is useful, it does have important limitations. First, when done without rigorous coding or careful consideration of underlying categories, thematic analysis can give the appearance that the researcher engaged lightly in their analytic effort. There are, unfortunately, many examples of thematic analysis in the published literature which serve to illustrate this point. These studies often lack compelling evidence that the researcher has developed the theme from underlying categories and/or cannot demonstrate how they made specific connections to the data. Second, thematic analysis is very dependent on well-formulated research questions. When conducting a thematic analysis, it is important that a researcher's questions give opportunities to refer to specific patterns in the data. In my work, this often means developing "what" or "how" research questions. Such questions prompt description and/or elaboration of underlying patterns and thus draw upon thematic analysis' strengths. Third, making explicit connections to a theoretical or conceptual framework can be difficult in a thematic analysis. In my own work, I prefer to use an a priori coding scheme when my research involves a particular framework, as this approach allows me to consider how conceptual or theoretical ideas might "speak" to patterns identified in the data.

In sum, while thematic analysis has some important limitations, it remains a very straightforward method for identifying patterns in qualitative data and producing themes that describe them. Indeed, for practice-based researchers, as well as those who are new to qualitative research, this approach is one that can be undertaken without significant training. For novice researchers, thematic analysis is often the first step toward learning about and using more sophisticated analytic methods (Braun & Clarke, 2006). Indeed, it serves as an important foundation for understanding other more sophisticated qualitative analytic techniques (Lester et al., 2020).

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